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COUNTRY PROFILE



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INTRODUCTION - 2002 COUNTRY PROFILES SERIES

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.

NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.

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LIST OF COMMONLY USED ACRONYMS

ACS	Association of Caribbean States
AMCEN	Africa Ministerial Conference on the Environment
AMU	Arab Maghreb Union
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CARICOM	The Caribbean Community and Common Market
CBD	Convention on Biological Diversity
CIS	Commonwealth of Independent States
CGIAR	Consultative Group on International Agricultural Research
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
CSD	Commission on Sustainable Development of the United Nations
DESA	Department for Economic and Social Affairs
ECA	Economic Commission for Africa
ECCAS	Economic Community for Central African States
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FIDA	Foundation for International Development Assistance
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHG	Greenhouse Gas
GIS	Geographical Information Systems
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IAEA	International Atomic Energy Agency
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
ICT	Information and Communication Technology
ICTSD	International Centre for Trade and Sustainable Development

IEEA	Integrated Environmental and Economic Accounting
IFAD	International Fund for Agricultural Development
IFCS	Intergovernmental Forum on Chemical Safety
IGADD	Intergovernmental Authority on Drought and Development
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
IRPTC	International Register of Potentially Toxic Chemicals
ISDR	International Strategy for Disaster Reduction
ISO	International Organization for Standardization
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
LA21	Local Agenda 21
LDCs	Least Developed Countries
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environmental Agreements
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
NSDS	National Sustainable Development Strategies
OAS	Organization of American States
OAU	Organization for African Unity
ODA	Official Development Assistance/Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
PRSP	Poverty Reduction Strategy Papers
SACEP	South Asian Cooperative Environment Programme
SADC	Southern African Development Community
SARD	Sustainable Agriculture and Rural Development
SIDS	Small Island Developing States
SPREP	South Pacific Regional Environment Programme
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development
UNCCD	United Nations Convention to Combat Desertification
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNIFEM	United Nations Development Fund for Women
UNU	United Nations University
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	World Wildlife Fund
WWW	World Weather Watch (WMO)

CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES

Decision-Making: A National Sustainable Commission was established in the Republic of Bulgaria with Decision No.1 of the Regional Development Council on July 2, 1999. Its chairman is the Minister of Environment and Waters and its members are the ministers of Labour and Social Care, Healthcare, Agriculture and Forests, and, Culture and the deputy-ministers of Tourism, Economy and Regional Development.

Gradual introduction of the principles for integration of environment protection requirements into the management of all areas of the Bulgarian economy has started. For this purpose all branch plans and development programmes include special environment management and protection measures. Many organizations are involved in international cooperation, including public and private organizations and representatives of donor programmes at various levels and in various sectors. Following the Istanbul Conference in 1998, direct relations and partnerships between Bulgarian municipalities and municipalities from other countries have become significantly more active, and are, in most cases, in line with the objectives of Agenda 21.

In observation of the UN Convention on Climate Change and the Kyoto Protocol documents, the monitoring of emissions is carried out and a national emission reduction action plan was elaborated and related to the National Energy Efficiency Programme approved by the National Assembly. In 1999 Bulgaria ratified the Framework Convention on Transboundary Cooperation, which increases the possibilities for direct cooperation between local and regional authorities from both sides of the boundary and facilitates the exchange of activity-related information between various levels and partners. Bulgaria has participated in the South Eastern Europe Stability Treaty ever since its creation in 1999, but this has not lead to tangible effects so far. In 1997-1999 a National Housing Strategy was drafted within a project of the British Know-How Fund, outlining the housing reform orientation, principles and specific mechanisms.

Programmes and Projects: United Nations Development Programme (UNDP) authorised to support sustainable human development through good governance, and is trying to encourage and participate in the better coordination of grants in Bulgaria. The framework agreement for cooperation for the period 1997-2000 has reoriented the efforts of UNDP towards poverty alleviation and jobs creation, capacity building for better governance and environment protection. Currently the organization supports 30 projects throughout the country. The UNDP/Capacity 21 programme is extremely active in the national and local level implementation of Agenda 21.

Transboundary cooperation programmes were adopted and agreed between the governments of Greece, Macedonia and Rumania and many meetings and seminars for participants from those countries were conducted. The programmes with Rumania and Greece receive financial assistance under the PHARE (Originally “Poland and Hungary Assistance for Economic Restructuring”) Programme. Bilateral Cooperation Programmes comprise of a large donor is the Global Environmental Facility (GEF). Other project donors are the Confederacy of Switzerland, the US Environment Protection Agency, the Japanese International Cooperation Agency (JICA), the British Know-How Fund, the Principality of Monaco, the International Atomic Agency of Vienna, UNESCO, and the Ramsar Bureau of the Wetlands Convention, the World. The Bulgarian Swiss Biodiversity Conservation Programme and the British Know-How Fund support the Solid Waste Management Project. Economic Policy Implementation Programmes - Pursuant to an agreement signed between the governments of the Republic of Bulgaria and the Kingdom of Denmark for cooperation in environmental protection, mainly three investment projects are being implemented.

Status: Although Reports on International Cooperation for Development-Bulgaria are developed annually, it is difficult to differentiate between and regionalize the projects under implementation. Viewed by sector, international support is oriented mainly to government and the economy (56%), infrastructure (17%) and industry (15%). The remaining relatively small part is distributed approximately equally between social development, healthcare, environment and “others.” Bulgaria participated actively in the elaboration of the Guidelines for Sustainable Spatial Development of the European Continent, adopted in September 2000 by the European Conference of Ministers Responsible for Spatial Planning in the European Council Member States, and in the elaboration of

Strategies for Complex Spatial Development of the Central European, Danubian and Adriatic Space (Vision Planet).

Capacity-Building, Education, Training and Awareness-Raising: In 1998 a Regional Conference was held in Sofia within the Campaign for Sustainable European Cities organized by the International Council for Local Environmental Initiatives (ICLEI), where a Charter for Sustainable Development of Cities in Central and Eastern Europe was adopted.

Information: Assisted by the ICLEI in the year 2000, Bulgaria became involved in the Global City Observatory by developing a national urban development database. Since 1997 Bulgaria has been part of the EU Environmental Monitoring and Information network. This network includes 42 monitoring points from the National Environmental Monitoring System. It allows the participation of the Bulgarian Executive Environmental Agency in European Environment Information and Observation Network (EIONET), the telemetric network of the European Environmental Agency. The national Bulgarian web sites include: www.mtt.govern.bg; www.mi.govern.bg; www.bfia.org; www.privatisation.online.bg.

Research and Technologies: No information available.

Financing: In 1998 external support reached 1.5 bln. Dollars, which is an increase of 45% as compared to the preceding year, and 13% of this amount, is granted while the remainder is from loans (in 1997 the grants amounted to 22%). Most donors have re-oriented their projects in support of the accelerated economic reforms in Bulgaria, but 50% of the entire amount is aimed to support the balance of payments. See also under **Programmes and Projects**.

Cooperation: In 1995 Bulgaria ratified the UN Convention on Climate Change and in 1998 it signed the Kyoto Protocol on the limitation of national carbon dioxide emissions. Different Agreements have been signed between the Ministry of Environment and Water (MOEW) and the Ministry of Environment of the Republic of Macedonia for Cooperation in Environmental Protection signed in Sofia on June 9, 2000; Agreement for Environmental Cooperation between the government of the Republic of Bulgaria and the government of the Republic of Turkey signed in Ankara on July 28, 1997; and a Declaration of the South Eastern European Countries for Environmental Cooperation signed in Sofia on December 2, 2000. Amongst activities for development of multilateral financing for cooperation are the following: Activation of regional level cooperation; Prevention of transboundary pollution, mutual provision of on-going information and undertaking of mutual activities; Construction of regional information monitoring systems; etc.

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CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES - TRADE

Decision-Making: The Agency for Economical Analyses and Prognoses (AEAP) takes part in the development of macroeconomic prognoses, strategies and helps the Government in its decision making process.

According to Bulgarian legislation and international negotiations, a special import-export license is needed for precious metals and products, intoxicating substances, nuclear material, equipment, gunpowder and explosives, weapons, etc. The trade policy at the domestic level is focused on the establishment of the market principles governing trade, and full compliance with the respective World Trade Organization (WTO) commitments and obligations.

Programmes and Projects: See under **Status**.

Status: The Ministry of Environment and Water suggested changing customs fees for pneumatic tires, regenerated and from the types used by automobiles and buses and trucks (fee N 4012 10 30 0; 4012 10 50 0; 40 12 10 80 0; 4012 20 90 0). The recent Asian crisis caused reduction of the prices of goods and raw material. This reflected the export of chemical products in Bulgaria, which was reduced by 30% in 1998 and 7% for the period January-November 1999. The reduction of the export of chemical products led to reduction of their production as well. The fast privatization and new investments in textile industry led to increase of the export of the goods of that sector of economy. For the period 1997-1998, the export of clothes and accessories increased by 27% and for the period January-November 1999 by 28%.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: As a member of WTO, Bulgaria provides information (so called notification) for the legislative amendments assumed after 1996 and the implementation of the requirements on international trade agreements. The Ministry of Economy does not present the full overview reports on the state of trade policy, investments and economy growth. An analysis on trade policy, regional cooperation and liberalization of trade stock exchange, is under preparation, which has to be presented to Organisation for Economic Co-operation and Development (OECD) in June 2000. AEAP is publishing monthly, 6 months periods and annual macroeconomic analyses. Monthly Business Surveys, semi-annual Reviews and Annual Report of the Macroeconomic Situation of Bulgaria are published in English and are received on subscription by IMF, World Bank, Institute for World economy in Kill, CEPR, London. The World Wide Web address of AEAP is www.online.bg/aeaf.

In the framework of the Ministry of Economy, there are Services for trade-economy activities in 60 cities in different countries. The Ministry of Economy transmits monthly information, via e-mail or radiograms about macroeconomic state in the country, data for foreign trade, information for future privatisation of enterprises, information about legislation and etc. These Services are responsible for information dissemination in those countries for potential investors. The national Bulgarian web sites include: www.mtt.govern.bg; www.mi.govern.bg; www.bfia.org; www.privatisation.online.bg.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The establishment of a Europe agreement between the European Union and its member states on the one hand and the Republic of Bulgaria on the other hand is providing the appropriate framework for the gradual integration of Bulgaria into the Union. Full Union membership is a priority for the country. Bulgaria's European Agreement sets out the following objectives: to gradually establish a free trade area between the community and Bulgaria covering substantially all trade; to promote the expansion of trade and harmonious economic relations between the parties; and to foster the dynamic economic development and prosperity of Bulgaria. The conclusion of such an agreement testifies to the political will of the parties concerned and contributes to the fulfilment of the basic

principles on which the European Union is founded. To this effect, the association agreement is a necessary prerequisite for an accession agreement and full membership.

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CHAPTER 3: COMBATING POVERTY

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS

Decision-Making: Currently, there is no competent state authority in Bulgaria dealing with the models of sustainable consumption and production. The Government considers that the Ministry of Industry should be the leading authority on the issues of changing consumption patterns.

Meanwhile, short-term strategies for the period 1999-2001 were developed for certain branches of light industry. A peculiarity in the development is to guide substantially the production facilities on the basis of the state of production, range stability, empty niches, etc. There are no legal or other regulations for encouraging sustainable consumption and production in light industry.

The national objectives for light industry can be summarized as follows: Strict adherence to specifications for every product; Reduction of material consumption within the framework of the general requirements; Waste recycling; and Reduction of the number of rejects.

Programmes and Projects: The Programme for Energy Efficiency Production in Light Industry for the period 1997-2000 was a part of the National Energy Efficiency Programme and was developed in compliance with the National Energy Efficiency Plan and Reduction of the Emissions of Greenhouse Gases - Contract DOE-1/93, financially secured by the State Department of the USA, within the range of the worldwide programme concerning these issues. Special attention for the programmes is paid to the environmental and social aspects of sustainable consumption and production. During the privatisation process, the Agency for Small and Medium-size Enterprises, as well as some Bulgarian and international funds, give credits for projects mainly to small and medium-size enterprises in order to encourage the sustainable consumption and production models. See also under **Capacity-Building, Education, Training and Awareness-Raising**.

Status: Within the framework of the light industry and its branches for the purposes of energy saving and other resources, the following measures have been undertaken: Electricity saving illuminating bodies, devices, equipment and machines were introduced; Many enterprises use their own water sources for industrial purposes as heating and production; and Local thermal power plants are used on a large scale. The delay is due to the prolonged process of privatisation and the poor economic state of the country at the moment. There is no strategy for sustainable consumption and production patterns because, the current trend towards rapid and efficient privatisation was considered useless to develop branch and national strategies and long-term working programmes for the proposed models.

Capacity-Building, Education, Training and Awareness-Raising: Energy Efficiency Strategy the goal of the project is to introduce practices at the municipality level that overcome barriers to improve energy efficiency and reduce emissions of greenhouse gases (GHGs) and other environmental pollutants. The project contains two elements: National Capacity Building; and Supporting Demonstrations. The Capacity Building activities that focus on municipalities as critical political and socio-economic units in Bulgaria are the basis of the project. These include: municipal energy management; training; and financing activities. For example, supporting demonstrations in street lighting, districts heating and building retrofit projects show how Capacity Building can be applied to real projects. Project Management supports these efforts and the rapid diffusion of Capacity Building and Demonstrations to other municipalities reaching at least 30 municipalities - a critical mass for ensuring that the reforms continue throughout the country after the project is concluded. The Development objective is to overcome barriers to increase energy efficiency and to the associated reductions in GHG emissions.

Information: During the current privatisation process, a Law for information is being developed. It has to guarantee access to appropriate information by the different enterprises and branches. The main goals are: to ensure monitoring and control for the planning process and decision-making process; and to provide relevant access to information for new regulations, standards and laws.

Research and Technologies: During processing in the leather industry, environmental friendly technologies are used in various ways which include: reconstruction of the Waste Water Treatment Plants; and introduction of cleaner technologies in the leather industry.

Financing: See under **Cooperation**.

Cooperation: The Global Environment Fund and USAID are supporting the project for Energy Efficiency Strategy to Decrease Greenhouse Gas Emission. It will be implemented in a Demonstration Zone in the City of Gabrovo. The GEF share of the project is US\$ 2.575 million; USAID is contributing US\$ 0.9 million. The Government of Republic of Bulgaria and the Government of Japan have signed the Agreement for the establishment of Energy Efficiency Centre in the industry in 1995. The Centre works on the problems of energy efficiency and environmental protection together with the Japanese specialists. The Centre investigates the energy consumption and possibilities for implementation of measures for energy efficiency in the different industrial branches. The Centre provides science and technical information and transfers energy efficiency technologies in the industry. There is an information system for analysis of energy consumption and energy efficiency management. The National programme for energy efficiency in the different branches of the industry was developed together with the National agency for energy efficiency and a Draft Law for energy efficiency.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS - ENERGY

Decision-Making: The Clean Air Act has been effective since 1996 and sets the main legal framework for the protection of clean air. The draft EC Directive on incineration of non-hazardous waste is completely adapted to the Bulgarian legislation. Air quality evaluation and management (Framework Directive 96/62/EEC, first Daughter Directive 1999/30/EC). An inventory of emissions has been in preparation since 1992 and was completed in the year 2000. It involves more than 2000 industrial enterprises. The Directive has been partially implemented in the Clean Air Act, in the Regulation on Ambient Air Quality Evaluation and Management, and in the Governmental Decree of 1998, which establishes the Bulgarian Accreditation Service. A new Regulation on Ambient Air Quality became effective during the year 2000 and corresponded to the European Directive and ought to be implemented by the end of the year 2003.

The draft amendment of the Energy and Energy Efficiency Act provides conclusion of long-term contracts for purchasing of electric energy from independent producers, which ensures stability of foreign investment. A National Energy Strategy has been recently debated in the National Assembly.

The Environmental Strategy and its 1994 update were completed in cooperation with the World Bank and the US Government. The basis of the Strategy is the eco-efficiency approach which, is concerned with changing the consumption/production models by means of minimizing energy consumption, and flows of pollutants and wastes per unit of economic output. The updating of the National Energy Development Strategy until 2010 will take into consideration the energy sector measures envisioned in the in the National Climate Change Action Plan. Among the Priority Measures are the following: Construction of de-sulphurisation systems in the large power plant; Introduction of primary and secondary NO_x controls and rehabilitation of electrostatic precipitators; etc.

Programmes and Projects: Bulgaria is finalizing a Pollution Abatement Programme that includes implementation of several projects involving, for example, technological reconstruction and innovations aimed at phasing out leaded gasoline and conversion of central heating from coal/oil to gas, in cooperation with the World Bank. National programmes for reduction of emissions of greenhouse gases and sulphur oxides are under development.

Status: The low technological and energy efficiency in the production and household sectors make human settlements big electricity consumers.

Capacity-Building, Education, Training and Awareness-Raising: MOEW organizes press-conferences acquainting journalists with the current ambient-air related issues. At national and international forums, representatives of the MOEW present data about the state of ambient air in the country and about the measures and policy of the MOEW for its preservation.

Information: Information is submitted to the State Agency on Energy and Energy Resources (SAEER) where investment programmes, strategies, secondary legislation and others are designed, and then it is passed on to the State Institute of Statistics for processing. The SAEER, the Ministry of Economy and the Bulgarian Academy of Sciences, assisted by all ministries and branches, prepare the country's macroeconomic framework.

The Executive Environmental Agency at the MOEW drafts daily, weekly and quarterly bulletins and annual reports on the condition of the environment (including ambient air), available to all interested persons and agencies. Daily data about the condition of the environment are presented on the web page of the Environmental Protection Agency at the MOEW. The MOEW issues a bulletin reporting on all events and news (including methods, legislation, projects, programmes and forums) regarding the environment. Information about the policy of the MOEW and the legislation, projects and programmes related to environmental protection may be found on the web page of the MOEW: www.moew.govrn.bg.

Heads of various departments and experts from the MOEW and the Environmental Executive Agency participate in radio and TV programmes presenting information about the state of ambient air and about the policy and measures undertaken by the MOEW for its preservation. The NEC Ltd. issues an annual book within the energy sector on the activities conducted during the preceding year. See also under **Decision-Making**.

Research and Technologies: NEC Ltd. and SAEER publish an ‘Energy’ magazine containing technical information such as articles on the liberalization of the electric energy market, the demands for electricity in the country, and announces implemented projects, if any, etc.

Financing: In 2000: 40% of the funding is provided by the National Budget and 60% the PHARE Programme; 2001: 64% by the National Budget and 36% the PHARE Programme; and 2002: 68% by the National Budget and 32% the PHARE Programme.

Cooperation: By signing the Goteborg Protocol (1999), the Republic of Bulgaria has committed itself to achieving further reduction of SOx emissions in 2010, by 57%. Bulgaria receives external funding from different sources amongst which are: The Fifth Framework Programme of the EU on scientific studies and technological development; the joint implementation of projects under the Framework UN Convention on Climate Change is implemented through financing under the Framework Agreement between Bulgaria and the Netherlands, the distribution is as follows: The government of the Netherlands – 70%; and the users of the projects – 30%; Trust Ecofund – a grant of 30%; etc. Other Sources of funding include: the SOx reduction projects and Energy sector projects are also financed by ISPA – 50 to 75% gratuitously; a credit from the MIF at 15-25%; and internal co-financing at 10%. See also under **Decision-Making**.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT

Decision-Making: The ministries of Transport and Communications, and Regional Development and Public Works; Executive Agency “Roads,” Executive Agency “Sea Administration,” and Executive Agency “Port Administration” are the government ministries and agencies responsible for making decisions in the management and improvement of the transport system.

The transport policy of Bulgaria is governed by the principles for development of the country, adopted by the government and achieved as a result of a national consensus. These policy directions that are primarily geared towards membership of the European union and NATO, development of free market relations, democratisation of the processes in the political, economical, cultural and social life of the people.

Bulgaria’s regulations and legislation in the transport sector include: Civil aviation law – approved and in force since 1.01.1999; Law on maritime spaces, inland waterways and ports of the Republic of Bulgaria - approved and in force since 14.02.2000; Road traffic law – approved and in force since 01.09.1999; Road transport law – approved and in force since 17.09.1999; Railway transport law – draft submitted for approval to the National Assembly; and Law for amendment of the Merchant Shipping Code - draft submitted for approval to the National Assembly. Priorities in the transport sector include: Harmonization of the national legislation and transport regulations with those of the European Union member states; Development of transport infrastructure; and Implementation of a structural reform and privatisation in transport.

Strategy for the development of transport infrastructure in the medium term (2000-2006) includes the following: development of transport and transport infrastructure is one of the priorities, set in the Programme of the Bulgarian Government; implementation of Bulgaria’s main objective – the accession to the European Union (EU), North Atlantic Treaty Organization (NATO) and the other Euro-Atlantic structures, highlights the necessity for a national transport system, comparable to a European one; and combination of an advantageous geographic location and Bulgaria’s determination to achieve its objectives in joining the EU has committed the Government to complete a number of projects along the routes of five of the ten Pan-European Transport Corridors. The strategic objectives for the development of transport infrastructure in the Medium term (2000-2006) include: ever greater opening of Bulgaria to Europe and neighbouring countries, as regards transport infrastructure; and two key priorities anticipated for attaining this strategic objective over the 2000 to 2006 period.

Programmes and Projects: Major programmes undertaken include the following: better meeting the commercial, private, and public needs for mobility in both urban and rural areas; promoting traffic efficiency, such as reduction of heavy traffic hours, provision of mass transport modes, etc.; improving efficiency in fuel consumption; Reducing emissions from transportation, such as carbon dioxide, carbon monoxide, nitrogen oxides, particulate matter and volatile organic compounds; Reducing traffic-related accidents and damages; and promoting non-motorized modes of transport, such as cycle ways, footways, etc.

The participation of Bulgaria in the Transport Infrastructure Needs Assessment (TINA) project is a very important component of the development of transport infrastructure. The Programme of Transport Sector Development also includes: constructing and developing of Sofia National Airport; restructuring, rehabilitation and modernization of rail transport; and rehabilitation, modernization and development of the national road network.

In accordance with the described priorities and principles for planning and construction of projects in transport infrastructure, the Government of Bulgaria has developed and adopted a four-year Middle-term National Investment Programme for the period 1998 – 2001. It clearly determines the obligations of the State Budget for development of the country’s infrastructure, including the transport sector. In addition, the Ministry of Transport and Communications has elaborated an Investment Programme for Development of the Transport Infrastructure of the country. It comprises 36 national investment transport projects, 25 of which are included in the Middle-term National Investment Programme of the Government. The investments, necessary for their construction till year 2015 are with a total amount of US\$ 4,890,85 Million. The projects are in the field of railway, combined, road, maritime (sea and inland waterways) and air transport and are situated along the five Pan-European Transport Corridors, which pass through the territory of Bulgaria. See also under **Cooperation**.

Status: About 41% of the total population has been threatened by air and water pollution coming from the energy sector, industry, and transportation. Fourteen hot spots with high levels of pollution harmful to human health have

been declared in the country. The pollution from the transport sector is increasing due to increased travel; the old aged vehicle fleet, and the imperfections of the existing road network. Heavy metal contamination is characteristic for areas adjacent to the motor ways in the towns and the outskirts. Noise pollution of the environment as a result of the transport and industrial sector is a big problem for towns affecting about 40% of the urban population. Road network - The total length of the national road network is 37,288 km. and the average density is 0.33 km per square kilometre. Approximately 90% of the roads are with asphalt surface. Bulgaria has 324 km motorways, 3,011 km first grade roads, 3,818 km second grade roads, 29,937 km third and fourth grade roads. The most common are two lane roads with overall width between 6.00 and 7.50 m. Railway network - The railway network of Bulgaria consists of about 4,300 km railway lines, 4,055 km of which is standard gauge (1,435 mm), the rest being narrow-gauge (960 mm).

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: See under **Status**.

Research and Technologies: No information available.

Financing: See under **Cooperation**.

Cooperation: The programme “Transit Roads” was started in 1992 with the financial help of the European Investment Bank, the European Bank for Reconstruction and Development and the PHARE programme. More than 600 km of first grade roads with intensive traffic were rehabilitated under the programme “Transit Roads 1.” The reconstruction of approximately 900 km of the main road network was catered for under the programme “Transit Roads 2”, carried out between 1997 and 1999. This programme was directed to the most heavily loaded sections in worst operational condition on the route of the international roads and the Pan-European corridors. The former General Road Directorate has already started the realization of the programme “Transit Roads 3”, which will cover the period 1999 – 2002 and cater for about 900 – 1000 km of the main road network.

Development of transport infrastructure along Pan-European Transport Corridor IX - Although the improvement of transport infrastructure along Corridor IX is not indicated as an immediate key measure for attaining the strategic objective, it plays an important role in coordinating the development of the Bulgarian transport infrastructure with that of neighbouring countries. The development of the road part of Pan-European Transport Corridor IX is a priority in the transport policy for both Romania and Greece. For that reason the Bulgarian Government has undertaken a number of measures for improving the road infrastructure on the Corridor amongst which are: construction of the access road to the Bulgarian/Greek border at Makaza; elaboration of a project for the construction of a tunnel under “Shipka”, thus eliminating the biggest bottleneck on the road part of Pan-European Transport Corridor IX on Bulgarian territory; and upgrading and rehabilitation of the existing sections of road Corridor IX, included in the programme “Transit roads III”, applying for funding under ISPA. Harmonious and effective development of Bulgaria’s infrastructure in the present Global conditions and trends could be achieved by continuously following the priority of coordinating national development with European and world trends.

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CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: The Government believes that population growth rates in Bulgaria are too low, and it has undertaken measures to raise the rate of population growth.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: In Bulgaria, responsibility for human health care is with the Council of Ministers, and the ministries of: Health, and Environment and Waters, and district and local divisions of the above ministries.

The National Assembly has adopted a National Health Strategy. As a pilot country, Bulgaria is preparing the National Environmental Health Action Plan (NEHAP) to be completed later this year. The Second Ministerial Conference on Environment and Health was held in Helsinki in June 1994, and it gave high priority to the development of NEHAPs under the Environmental Health Action Plans for Europe (EHAPE) programme. Bulgaria is preparing the NEHAP, which is in its final version after seminars, discussions, and comments. The NEHAP gives a detailed analysis of the many factors contributing to environmental health in Bulgaria, and sets out a range of specific actions for remedying identified environmental health problems or for securing further improvements. The NEHAP is a large-scale, long-term project, covering all departments and is the basis for satisfying the health and ecological interests of the country.

Programmes and Projects: Environment improvement programmes should be based on intersectoral cooperation to ensure coordination and consistency in setting priorities and determining the necessary actions. These programmes should consistently eliminate or reduce the impact of the most widespread risk factors such as: radiation impacts; toxic factors; noise; foodstuffs; and safe working environment. In conjunction with the actions to mitigate the general impact of risk factors, specific actions must be formulated and pursued with respect to groups of the population exposed to high health risks, most specifically: children; the elderly; the disabled; and people suffering from chronic diseases and invalidism. The relatively narrow range of diseases that condition morbidity, mortality, and invalidism allows selective prevention and therapy to be focused on their immediate effects upon the nation's health status.

Status: Efficient and sustainable solutions to the nation's health problems should rely on broad socio-economic, educational, technical and technological measures, as well as health care measures. These should bring about the required changes in lifestyle, the environment, and the attitude of risk groups to the diseases that are the most common causes of disability and death. In conjunction with measures aimed at preventing disease, emphasis should be laid on health promotion, including health building and radical prevention. Being the most promising development path for health care, health promotion is one of the pillars of modern health strategies.

In Bulgaria, there are 33.6 medical doctors; 6.8 dentists; and 2.9 pharmacists per 10,000 populations.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: Funding is provided by the State budget, including the Health Protection Fund and the National Environmental Protection Fund, cover 98% of health costs.

Cooperation: Regional and international support and cooperation is derived from the European Union's PHARE, The Trans-European Mobility Scheme for University Studies (TEMPUS), and INTERREG (cross-border cooperation between regions) programmes, the World Health Organization (WHO) especially its Regional Office for Europe, and the World Bank.

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CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: Responsibility for human settlement development in Bulgaria is with the ministries of: Environment (MoE); Health Care; Regional Development and Construction; Regional Inspectorates for Environmental Protection; municipalities; the technical State Control on Construction; and the Commission on Land. Closer coordination between the Ministry of Education, Science and Technology (MEST) and MoE is required, as well as a distribution of responsibilities and powers with local municipal governments.

A number of regional, national, and local environmental projects are under implementation. Since 1992, the procedure for environmental impact assessment has been mandatory for urban infrastructure plans. Through this MoE exercises preventive control for the environmental protection of human settlements. Regional environmental policy focuses on priority measures in specific regions or zones, which are highly urbanized with high health risk, and exclusive significance for the country (the Bulgarian part of the Black sea coast, the Danube river basin, and protected territories). The establishment of a National Fund for Regional Development is envisaged.

Programmes and Projects: The National Fund for Environmental Protection supports as priority projects ones connected with environmental protection and especially those located in “hot spots.” See also under **Decision-Making**.

Status: In order to overcome the serious problems of urban infrastructure caused by the continuous application of the approach for functional zoning, the following measures are to be undertaken amongst which are the following: the preservation of municipal property in these territories should be regulated by the Law on Municipal Property and the Law on Territorial Development; new plans for the principle of space integration and merging of the functions at all levels of planning from the agglomeration to the town and the individual residential district; and creation of new legislation to regulate the scope of the master urban plan, which should include the zone around the town and aim at ensuring well balanced sustainable development; etc. The urban network in Bulgaria (5,336 human settlements) has been formed for millenniums. It bears the signs of ancient cultures (Tracian and Slavonic dwellings, ancient Greek and Roman towns) and all the negative consequences of contemporary urbanization. All characteristic features of Bulgarian towns in recent years indicate alarming signs of lagging behind European standards and of instability amongst which are: demographic structure; social community; economic activity; etc. The issue of the quality of the urban living environment is becoming more and more important for public health care, as well as for the economy of resources.

Environmental surveys show that in 1989, more than 40% of the population lived in human settlements with bad air quality, seriously polluted rivers, and poor groundwater quality. Heavy metal contamination is characteristic for areas adjacent to the motor ways in the towns and the outskirts. Noise pollution of the environment as a result of the transport and industrial sector is a big problem for towns affecting about 40% of the urban population. The problem of waste disposal has not been solved yet and the construction of wastewater treatment plants is very slow. The low technological and energy efficiency in the production and household sectors make human settlements big electricity consumers. However, the state of the environment in the small towns and villages is good apart from the low level of infrastructure. In comparing conditions in human settlements with previous years, there has been a decrease in environmental pollution caused by industry, due to reduced production and consumption. This tendency is not sustainable in character, because a restoration of economic activity is expected. The pollution from the transport sector is increasing due to increased travel, old aged vehicle fleet, and the imperfections of the existing road network.

Capacity-Building, Education, Training and Awareness-Raising: Capacity-building and technology issues related to sustainable settlements include the need to seek high efficiency for each investment of the limited resources and efforts taking into consideration the dynamic, technological, economic, political, and cultural priorities of the country.

Information: No information available.

Research and Technologies: No information available.

Financing: The establishment of a National Fund for Regional Development is envisaged in the near future.

Cooperation: No information available.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: The National Centre of Environment and Sustainable Development is the institution, which, together with the Ministry of Regional Development and Public Works, are responsible for the policymaking process and coordination of all issues regarding sustainable development in Bulgaria. By the end of 1998, a National Commission for Sustainable Development was established and its purpose was to ensure the operationalization and broadening of the Bulgarian commitments to Sustainable Development. The primary task for the National Commission was to develop the Bulgarian Agenda 21 and to ensure that the commitments made by the Bulgarian Government at Rio de Janeiro, and the implications of the Earth Summit to Bulgaria are implemented, periodically monitored and coordinated.

The 1991 Environmental Protection Law and its 1992 amendments provide a strong legislative framework for environmental policy, on the basis of which the Ministry of Environment has prepared draft laws in a number of key areas including: air; water; nature conservation; natural resource management; and biodiversity. The introduction of environmental impact assessments (EIAs) has been the most important step in the development of policy instruments, and in 3 years, more than 1,000 projects have been subjected to this process. Recent legislative amendments, however, could weaken EIAs. Amendments to the Environmental Protection Law passed in early 1995 exempt projects of vital importance from the public participation requirements of the EIA process.

The Environmental Strategy and its 1994 update were completed in cooperation with the World Bank and the US Government. The basis of the Strategy is the eco-efficiency approach, which is concerned with changing the consumption/production models by means of minimizing energy consumption, and flows of pollutants and wastes per unit of economic output. Although the Environmental Strategy and the 1994 update are based on extensive analysis, including consultation with experts in other ministries, the process for their development did not lead to a strong inter-ministerial commitment or to greater public awareness of the economic reforms needed for improved environmental management. The Strategy and its update have been adopted by the Ministry of the Environment but not yet endorsed by the Government.

The representation of NGOs and the private sector, as counterparts of the government in the planned National Commission is a significant breakthrough in bringing these groups into the mainstream of the development process through such activities as: public information, participation, active involvement of environmental NGOs and the preparation of a legal framework to guarantee public access to information.

Programmes and Projects: The Capacity 21/UNDP programme in Bulgaria, initiated in February 1997 and it is intended to lay the groundwork for a national sustainable development strategy by promoting and testing models for sustainable development at the community level. At the national level, the Programme envisages the establishment of a National Commission for Sustainable Development (NCSD) chaired by the Deputy Minister. The promotion of the crucial role of women in development and facilitating their greater participation in all aspects of socio-economic life of the Bulgarian society is an important component of the Programme.

The Programme foresees the establishment and operation of three working groups. The activities of the first working group involves: supporting two Bulgarian municipalities to develop their sustainable development strategies; conducting workshops and meetings to help the pilot communities define their needs and strategies for meeting them; assisting the pilot communities to design and implement their demonstration projects; and collecting and analysing methodologies and lessons learned from other community. The second working group assists the Ministry of Education, Science and Technologies to develop a new education strategy for integrating sustainable development concepts into primary and secondary schools, and develops and implements a "training of trainers programme with older students and students from teacher training colleges. Another group provides a support for a programme of activities to improve the capacity of civil society to participate in sustainable development activities in the Maritza River Basin and provides support to enhance the capacity of Bulgarian journalists to promote public involvement in sustainable development initiatives in Bulgaria.

Status: Bulgaria has strong will and commitment to implementing Rio's principles and Agenda 21. It is also going through a major transition from a centrally planned to a market economy and is at a watershed in its development. Experience has so far demonstrated that a considerable share of the country's potential is not realized due to lack of: information; policy measures; local expertise; and public awareness in addition to the more specific challenges

posed by the transition process. In spite of the difficult conditions, Bulgaria has made significant progress since 1989 in improving the policy framework and strengthening its institutions for protecting the environment. In Bulgaria, the best opportunity to pursue the global objectives of integration, participation, and information currently exists at the community level. The integration efforts in Bulgaria are hampered by the vertical organization of the central administration, which is in part a legacy of central planning. The major sectoral ministries, such as those dealing with energy and industry, have paid little attention to environmental problems or goals. Budget cuts have led to reductions or elimination of environmental units in some ministries.

Capacity-Building, Education, Training and Awareness-Raising: The Capacity 21 Programme is supporting the revision of the national education strategy and promoting public awareness and targeted training of journalists and the private sector.

Information: No information available.

Research and Technologies: No information available.

Financing: In order to determine the appropriate behaviour for all stakeholders, various economic instruments such as: taxes; fines; additional import duties; subsidies; etc. have been developed and implemented. These form the basic revenue of the National and many Municipal Environmental Protection Funds.

Cooperation: The Government will be placed at the very centre of resource mobilization activities with UNDP providing the necessary support. Government Cost-Sharing has the additional advantage of enhancing national ownership and sustainability of UNDP interventions. The success of resource mobilization initiatives depends to a large extent on the Government's commitment to be actively involved in support of such initiatives.

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CHAPTER 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: The MOEW conducts Bulgaria's overall environment protection policy, including the clean ambient air policy. In addition, the ministries of: Healthcare; Economy; and Transport and Communications; etc. are involved in the following activities: developing the strategy of the government for environmental protection; coordinating the environmental control functions of ministries and agencies; and jointly with the interested ministries and other state authorities approves emission levels and concentration limits for harmful substances by region, by environmental media and by pollutant type. Regional inspectorates of environment and waters have been established as authorities of the Ministry of Environment and Waters to conduct the environment protection policy and serve the municipalities, which do not have environment protection equipment and staff.

The protection of ambient air is legally defined in the Clean Air Act and in the following regulations harmonized with the EU legislation amongst which are: Regulation No 1/13.02.1998 on the conditions and procedures for approval of temporary standards for harmful substances emitted in the ambient air from immobile operational sites. (SG issue 51/98). For further details, see the web page <http://www.moew.govrn.bg>; Regulation No 2/19.02.1998 on the admissible emission levels for emissions of harmful substances in the ambient air from sites with immobile sources. (SG issue 51/98); etc. The Environment Protection Act defines the basic framework for the environmental policy by using principles such as: "polluter pays", "public right to know" and "prevention"; assigns to the Ministry of Environment and Waters and its regional structures and to the municipalities all authority for the implementation of the policy of the state; defines the payment of all taxes, fees, penalties and sanctions for damages or pollution caused; and it also defines the establishment of the National Nature Protection Fund and the Municipal Environmental Protection Funds. Economic Tools Introduced for Environmental Purposes includes: Sanctions; Tax relief; and Emission fees.

The First National Report on Climate Change was completed in conjunction with the National Energy Strategy, which was recently debated in the National Assembly. This was followed by a study on the Environment Strategy for Bulgaria conducted in 1994 and by an updating and follow up proposed, again, by World Bank experts (Report 131493BUL). These documents are being developed under a joint project with the Ministry of Nature, Nature Resources and Nuclear Safety (BMU) of Germany financed under the PHARE 98 Programme. The 'Air' section will define the overall ambient air protection strategy. In July 2000 the Council of Ministers adopted a National Climate Change Action Plan. The Plan should be adopted during the subsequent years with a view to the main strategic objective of the National Plan for Economic Development (NPED) for 2000-2006. The National Strategy for the Ozone Layer Depleting Substances is aimed at the gradual termination of their use. For this purpose the National Assembly elaborated a National Programme for the Termination of the Use of Ozone Layer Depleting Substances. Its short-term (2-3 years) goals for the mitigating ozone depletion are: elaboration of a national programme for the disuse of hydro-chlorfluorcarbonates (HCFC) by July 2002; gradual reduction of the use of methyl bromide in accordance with the Montreal Protocol. Long-term (5-10 years) objectives include: termination of the use of methyl bromide until 2005; and termination of the use of HCFC until 2010.

Programmes and Projects: Bulgaria has completed a National Programme for Phasing out Ozone-depleting Substances and is utilizing a Global Environment Facility (GEF) grant of US\$10.5 million to implement it. National programmes for reduction of emissions of greenhouse gases and sulphur oxides are under development. Unassisted, Bulgaria terminated the use of freons in construction, pharmaceuticals and perfumery as early as 1995-1996. In prevention of illegal imports and use of prohibited freons, portable Freon analyzers were purchased and experts in the Regional Inspectorates of Environment and Waters of the MOEW use them as a control device. A strategy for CFC management in existing plants is under preparation with a view to reducing their emissions in the atmosphere. The following "atmosphere" related programmes were elaborated, approved and successfully implemented amongst which are: National Programme for phase out of leaded gasoline in the Republic of Bulgaria; National Programme for Termination of the Use of Ozone Layer Depleting Substances; etc. Project for further construction of the system for real-time monitoring of air; and the Project for ambient air quality monitoring systems in 4 towns on the Danube; are among the ones implemented in Bulgaria. See also under **Capacity-Building, Education, Training and Awareness-Raising**.

Status: There is enough brown coal with more than 3.5% sulphur content and up to 60% humidity and 70% ash residuals. Coal provides 45 to 53% of the total energy production (38 billion kWh in 1994). In addition, because of the severe drought experienced over the last five years, the share of hydro energy in total production has fallen from between 6-8% to 1-2%. About 41% of the total population has been threatened by air and water pollution coming from the energy sector, industry, and transportation. Fourteen hot spots with high levels of pollution harmful to human health have been declared in the country. Pollution loads may increase once economic growth resumes, unless environmental policy is strengthened. In fact the 1.4% growth of GNP registered in 1994 was equal to an increase of 300,000 tons of emissions compared to 1993. In Bulgaria, ambient air quality is controlled only in the urban environment and the country has no system for early warning for the population.

Capacity-Building, Education, Training and Awareness-Raising: A centre was established retraining refrigerator repairman in using alternative substance. More than 1,500 repairmen were trained, and they received free service equipment. Thirty two Freon 12 recycling and regeneration centres were established throughout the country, and were granted to refrigerator repair companies. According to the Environment Protection Act, every year the Ministry issues a Green Book where not only detailed air quality information is presented, but also all ambient air protection activities undertaken at the national and local levels are described.

A number of seminars were organized by the ecological movement Ekoglasnost in several large municipalities where scientists and government experts acquainted the public with the activities undertaken against climate changes and for protection of the atmosphere.

National public campaigns for ambient air related awareness are conducted by non-governmental organizations and they include: radio and TV shows; publications in newspapers and specialized magazines; seminars; press-conferences; children's drawing contest and contests for best presentation of the subject by journalists; issuance of leaflets and advertising materials; concerts; etc. The Ministry of Education and Science (MOS) in Bulgaria has the direct task of providing environmental knowledge in secondary and tertiary level schools. In 1996 the MOS approved and cooperated in the publication and distribution of ecological education bulletins in schools. This was made possible through the assistance of the Environmental Education and Technologies Association sponsored by the PHARE programme. In 1997 the MOS approved the Ecological Education in Secondary School curriculum, uniting the ecological elements contained in other subjects into one. In April 1998, the MOS, in cooperation with the National Education Institute and with the European Council, organized a seminar called "Ecological Requirements for School Curricula" as a stage of the EU Project on "Secondary Education in Europe."

Information: Studies have been conducted jointly with experts from: United States Environmental Protection Agency (USEPA); the Danish Environmental Protection Agency (DEPA); the World Bank; UNDP; UNEP; REC; etc. The evaluation of GHG emissions and the study of their impact were conducted under the project "Study for Bulgaria of Climate Change Issues", developed in 1993-1996 with the financial assistance of the Department of Energy of the USA. The results from this study and the National Climate Action Plan elaborated on its basis were broadly publicized through the mass media, discussed at NGO seminars and meetings and were submitted to libraries, scientific institutions etc.

Automatic stations - the one-minute data are kept for a period of one year at the regional dispatching points. The half-hour and the one-hour data are sent to the national database once daily in the same manner as the data from the manually operated points. The construction of the national database and of the local data bases designed in ORACLE was started in the year 2000. A wide-area network was established between the Regional Inspectorates of Environment and Waters (RIEW) and European Environment Agency (EEA). A PHARE project was initiated at the end of the same year. At the end of the project in the year 2002, all automatic stations in Bulgaria will be connected via radio with the RDP. The web page of the EEA, www.nfp-bg.eionet.eu.int, presents data on the condition of the environment on a daily basis and for details about MOEW's environment protection policy, the legislation, projects and programmes, see, www.moew.govrn.bg. The MOEW organizes press-conferences acquainting journalists with the current ambient-air related issues.

Research and Technologies: Research in Bulgaria involves scientists from various institutes of the Bulgarian Academy of Sciences, the National Institute of Meteorology and Hydrology, the Institute of Forests, the Institute of Nuclear Research and Nuclear Energy, the Institute of Economics, and other organizations. The Executive Environment Agency is one of the main coordinators of research of this type with much of the work being done

under international projects funded by the PHARE Programme, or under bilateral cooperation agreement. The ambient air quality technologies include: a National Network of manually operated and automatic ambient air quality monitoring points and mobile stations have been created; dispersion models are used in determining the ground-level concentration of harmful substances; and The MOEW has an electronic data base on ambient air condition and on the sources of harmful substances. New GHG emission reduction technologies have been used in the implementation of several projects amongst which are: Installation of carbon-in-ash analyzers in 5 of the largest coal stations in Bulgaria; Installation of low-nitrogen burners in three steam boilers in one of Sofia's heating plants; etc.

Financing: Funds are derived from: the State budget; the National Environmental Protection Fund; municipal Environmental Protection Funds; and the Environmental Trust Fund, and external financing.

Cooperation: In cooperation with the World Bank, Bulgaria is finalizing a Pollution Abatement Programme Regional and international cooperation for atmospheric protection led to Agreements with Romania, Germany, and the USA, and Programmes for Air Purity Protection. The main international partners are the PHARE Programme, the UNDP, the UNEP, and the Global Environmental Facility of the WB, the Danish Environmental Agency, DEPA, and the French Agency for Energy and Environment ADEME, the Dutch Senter International etc.

Bulgaria is a party to: UNFCCC and Kyoto Protocol; Vienna Convention for the protection of the Ozone Layer; and Montreal Protocol for the Substances that deplete the Ozone Layer as amended. The London and Copenhagen amendments to the Protocol were ratified on May 13, 1998, and the Montreal amendments were ratified on September 23, 1999. The Republic of Bulgaria ratified the Convention on Long-Range Transboundary Air Pollution on February 19, 1981, and it became effective in Bulgaria on March 16, 1983. The following protocols to this Convention are ratified or signed: The EMEP Protocol signed 1985, ratified on 1986; Sulphur protocol, signed 1985, ratified 1986; NOx protocol, signed 1988, ratified 1989; Volatile Organic Compounds Protocol, signed 1991, ratified 1998; etc. Representatives of the Ministry of Environment and Waters and of the Executive Environmental Agency have participated in several training courses amongst which are: Advanced International Training Programme "Air Pollution Management & Technology" organized by Swedish International Development Cooperation Agency; Training course for the Eastern European countries – Changes of the Global Climate and Development; etc.

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CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

Decision-Making: The responsible bodies include: the sectoral ministries of: Energy and Energy Resources; Industry; Environment; Regional Development and Construction; and the Committee on Geology and Mineral Resources. At a lower level, the competencies of the municipalities are only with respect to construction materials. The planning of land resources and human settlements are the core issues of the National Strategy for Territorial Development, which was developed with special emphasis on transboundary infrastructural communications. The recently adopted Land Protection Act provides the framework for the sustainable use of land resources, especially of arable land. The changes of the Law on the property and using of the agricultural lands are assumed and according to the law the owners of the lands are free by state and notary taxes for 5 years period of time. This legislative prerequisite is going to facilitate the trade and market of agricultural lands. The Law on the property and use of the agricultural lands and its ordinances restored the property of agricultural lands to its former owners. The owners are free to choose the way to use agricultural lands by their purpose and are able to consolidate their land in the cooperation for the cultivation. There are conditions for re-allocating of the lands by use of state and regional land funds. This is done by exchange of private and state lands. To achieve re-allocation of private lands with state ones, a good organization is established for fast exchange and the process is decentralized. The local authorities will play an active part in that process also. The use of state land fund for re-allocation with exchange is applicable for big investors, which have to take the responsibility to create a new permanent plantation or a specialized hi tech plants production. The state will take an active role in the land market, by emitting the compensatory bonuses and is going to sell the state land to owners of such compensatory bonuses. Also the Ordinance is going to be developed for ensuring people to receive lands for agricultural purposes.

Partnerships involving a wide range of individuals and organizations can and should play a key role in conserving biological diversity in Bulgaria. Partnerships can be formed to support many conservation activities, including park and trail maintenance, education and interpretation programmes, and biological inventory and monitoring, and fund raising. In Bulgaria, innovative conservation partnerships are still relatively uncommon. However, it is a country rich in human skills, knowledge, and commitment needed to build successful partnerships. The principal aim of the Pan-European Biological and Landscape Diversity Strategy is to find a consistent response to the decline of biological and landscape diversity in Europe and to ensure the sustainability of the natural environment. Special emphasis is put on concerted European action under the Convention on Biological Diversity.

National authorities, donors, international organizations, non-governmental organizations, the research community and the general public are implementing the Strategy. The twenty-year time span of the Strategy consists of five-year action plans. The first one, which was planned and approved for 1996-2000, addresses 11 Action. National Strategy for the Conservation and Management of Wetlands was prepared in 1993 and a Programme for the Management of the Black Sea Coastal Zone whose implementation has already started; and Ministry of Environment and Water established a National Nature Protection Service (NNPS) in March 1994. National Strategy for Biological Diversity in Bulgaria was established in December 1994 and it includes: Strengthening the Scientific Basis for Conservation; Legislative Initiatives; Expanding and Strengthening the Protected Areas Network; Environmental Education and Cooperative Extension; Developing and Implementing an Ecotourism Policy; Stimulating Conservation in the Black Sea Basin; Stimulating Conservation in the Balkan Peninsula; and Protected areas law- adopted from the Parliament in 1998.

Programmes and Projects: The various activities for improving the management and conservation of biological diversity in protected areas are developed by the Ministry of Environment and Water in the framework of international programmes and projects. See also under **Information**.

Status: Bulgaria thus ranks among the most biologically diverse countries in Europe and the country has taken urgent measures and legislative actions in order to enforce principals, recommendations and decisions of the UN Convention on Biological Diversity, the Pan-European Biological, and Landscape Diversity Strategy.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: The “Programme for monitoring of ornithological important places” of the Bulgarian Society for the Protection of Birds; the research projects undertaken through the Bulgarian-Swiss Biodiversity Conservation Programme in the regions of the Black Sea coast, Strandja, the Eastern Rhodopes, Dobrudja and Central Balkan; study and mapping of the vegetation in the reserve Tisata; mapping of deposits of rare endangered species of the flora in Bulgaria with a view to include them in protected areas; etc.

Research and Technologies: There is a considerable increase in scientific information and research programmes concerning protected areas. As a result of the recent economic difficulties, the support for a number of Bulgarian scientific institutes is practically withdrawn. Research is almost entirely carried out by non-governmental organizations or under various nature conservation projects. Amongst the many important ongoing or completed research and applied research developments.

Financing: No information available.

Cooperation: Main partners of the Ministry in this respect are the US government and the government of Switzerland. Under the PREST project the Bulgarian authorities were supported in the conservation of the qualities of nature in the areas within and around the national parks Rila and Pirin through transfer of British practical experience in protected area management.

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CHAPTER 11: COMBATING DEFORESTATION

Decision-Making: In Bulgaria, the Committee of Forests of the Council of Ministers, and the Ministry of Environment represent the decision making structure. Forest priorities for Bulgaria includes sustainable management and use of resources; restoration of habitats; support of international initiatives; and legislative improvement.

Main national laws, which concern the Bulgarian forestry, are the Forests Act (adopted on 29.12.1997) and the Restitution of Forests Act (adopted on 25.11.1997). The Forests Act threats the issues about general definitions of terms “forest” and “Forest Areas”; the forests ownership; forests management and organization; forests regeneration; harvesting; forests guarding and protection; construction activities in the forests; forestry sector financing; penalties. There are two main points – this law establishes the base for restitution of forests and implementation of the structural reform, which means separation between state and economic activities in the forests. The Restitution of Forests Act defines all procedures for the restitution process and responsible parties for its implementation. At present moment is finished the first stage of the whole process – gathering of applications and is ongoing the second stage – real ownership restoration. A new Hunting and Game Protection Act has been prepared and is in procedure of adoption. Recommending minimal prices during 1998 were elaborated and included in the Bulgarian National Standard. They are in accordance with the demand, offering and quality requirements of the harmonized with the EU standards, in order to guarantee the Bulgarian forest regeneration. New 11 standards in accordance with EU standards were developed and enforced under Bulgarian National Standard. A concrete action taken in Bulgaria to implement the IPF proposals was the drawing up and enforcement of a New Forest policy.

Bulgaria recognizes and respects customary and traditional rights, including the right to land and land tenure of indigenous people, local communities, forest dwellers and forest owners and this has been guaranteed by the current Forest Act. Bulgaria has only initial ideas for starting the forest certification process but the Government is highly interested in supporting it in order to introduce new market mechanisms. There are still no clear financial mechanisms for compensation of the future private forest owners. It is envisaged a bylaw under the Forest Act to developed in this regard.

Programmes and Projects: Bulgarian National Forest Programme (NFP) is still in preparation. A key issue in it will be including of the IPF proposals. There will be strong emphasis on integrated forest and agricultural management. Bulgarian NFP is being developed in accordance with Bulgarian Strategy for Biodiversity Conservation; Bulgarian National Action Plan for Biodiversity Conservation. The cross-sectoral approach is the basis for development of the NFP.

Status: According to received applications there are claims for 13% private, 5% of authorities (school and religious) and 38% municipal forests in future. It is expected the ratio between different kinds of ownership to be 82% state owned, 5% municipality owned, 10% private owned and 3% owned by authorities forests after restitution process finalization. It is envisaged about 30% of future state forests to be given for use of municipalities. After Restitution of Forest Act and following from its sub-regulation adoption, started the work for strengthening of Regional Land Commissions. In the RFBs and SFs has established special working groups, which prepared and submitted to the Land Commissions all existing information and documentation in each forestry unit. Some specific issues as the case of missing old documents were additionally elaborated and solved. This additional work has lead to amendment of the Law for the Forest Restitution in early 1999. Detailed analysis of all applications and fixing of digital models coming from forestry management plans and plans for restitution of agricultural lands is ongoing as a basis for real ownership restoration.

There are significant damages caused by poaching. At the same time the forestry is the main livelihood in certain regions e.g. local people in rural areas commonly use firewood. In Bulgaria, only papers are recycled and the quantity is generally insignificant. Amongst other challenges are the following: Institutional strengthening of the National Forestry Board and its regional and local units in regard to the Forests Act implementation and structural reform accomplishment; Staff education and training; Development of a General Information System for the forestry sector; Improvement of the forestry infrastructure; Development of national standards for the forestry certification and support of the whole process in the country; Finalization of the restitution process; etc.

Capacity-Building, Education, Training and Awareness-Raising: The year 1998 started the appointment and training of forestry experts in each Land Commission. Guidelines for implementation of the law requirements have been developed, as well as all different kinds of necessary application forms have been prepared.

Information: A large amount of national information already exists on forests and national progress towards sustainable forest management within the United Nations system and other intergovernmental organizations. Reference is made, in particular, to the following sources: FAO's Survey on the status and progress in the implementation of national forest programmes, 1998; FAO/ State of the World's Forests, 1999; FAO/Forest Resources Assessment for the year 2000 (FRA 2000). A concrete step taken in implementing the IPF proposals for action in Bulgaria was the starting of the restitution process. Information on sustainable forest management is made available to potential users mainly through media. Internet could be a good tool for spreading of information.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Bulgaria participates in the Pan-European process. In Bulgaria, the governance process became more transparent due to the criteria and indicators for sustainable forest management, the forest policy has cross-sectoral basis, and the information flows is more operative and easily measured. The criteria and indicators used in the country to assess progress towards sustainable forest management at the international level include: appropriate enhancement of forest resources and their contribution to the global carbon cycle; Maintenance of forest ecosystems health condition and vigour; Maintenance and increase of productive functions of forests (wood and non-wood); conservation and appropriate enhancement of biodiversity in forest; appropriate enhancement of protective functions in forest management (notably soil and water); and Maintenance of other socio-economic functions and conditions.

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CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: The Ministry of Agriculture and Food Industry, the Committee of Forests at the Council of Ministers, and the Ministry of Environment are responsible for drought and related issues.

Programmes and Projects: Financing of land degradation projects comes from the National Fund for the Preservation and Improvement of Agricultural Land Productivity; the National Fund for Forestry Cultivation Procedures and Construction of Forest Roads; the National Environmental Protection Fund.

Status: No desertification processes have been observed in Bulgaria. Degradation processes are observed in the low-mountain areas of South Bulgaria and along the southern slopes of the mountains. This is the result of deforestation activities carried out in the last century and at the beginning of this century, as well as the progress of intensive erosion processes which have strongly or very strongly affected 8,020 km² of agricultural lands. For the last 45 years, 9,760 km² of forest species have been planted, 6,800 km² of which were for erosion control projects. In the last 7 years the number of erosion control activities has significantly decreased due to financial difficulties.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: See under **Programmes and Projects**.

Cooperation: The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification particularly in Africa has not been signed by Bulgaria.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

Decision-Making: The responsibility for sustainable mountain development in Bulgaria is with the ministries of: Environment and Water; Agriculture and Forests; and Regional Development plus Construction and municipalities. NGOs contribute to national processes. The Government pays special attention to these regions and provides subsidies and business opportunities to ensure the quality of life of their inhabitants.

Programmes and Projects: No information available.

Status: Mountain and semi-mountain areas (up to 2,925 m) comprise 46% of the national territory; 34% of the Bulgarian population live in 1,207 communities in those areas.

Capacity-Building, Education, Training and Awareness-Raising: The forestry sector in the mountains is well provided with personnel, but in the other sectors there is a lack of personnel.

Information: No information available.

Research and Technologies: No information available.

Financing: In 1995, a special Fund for Environmental Projects in Mountain Regions provided about BGL 47 million in grants and interest-free loans for combating deforestation and erosion, water supply and sanitation, specific economic activities, ecotourism, and agriculture. The main revenues of the Fund come from taxes on motor fuels. In 1996, this Fund was merged with the National Environmental Protection Fund. See also under **Cooperation**.

Cooperation: Financing for mountain area development is provided from National and municipal budgets, the National Environmental Protection Fund, and grants. Bilateral cooperation for mountain protected areas comes from Switzerland, USA, and the Global Environment Facility (GEF).

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

Decision-Making: The decision-making structure for agriculture is provided by the Collegium, whose members are: the Deputy Ministers; the Heads of Departments; the Chairman of the Agricultural Academy; and the Heads of the organizations and services with the Ministry of Agriculture, Forestry and Agrarian Reform. The national bodies responsible for the nutrition and food policy in Bulgaria include the Ministry of Health; Ministry of Agriculture; National Center for Health Education; Regional Hygiene and Epidemiology Inspectorates.

There are about 90 decrees and legislative acts concerning nutrition and food safety but the Food Law was elaborated only in 1998 and has been submitted to the Parliament for its consideration. Draft for Food and Nutrition Policy was developed in 1992 after the International Conference on Nutrition in Rome. A Governmental Decree and programme for Iodine Deficiency Disorders and Diseases (IDD) control were adopted in May 1994. A basic Food Law was developed and at present it is under consideration in the Parliament. An extensive updating of existing food regulations started. They are harmonizing with the European Union Directives.

Strengthening the regulatory control over food is undertaken through structural and functional reforms of the regional Hygiene and Epidemiology Inspectorates. The internationally recognized system for efficiency assurance of the food safety “Hazard Analysis Critical Control Point” is being adapted and applied. Some measures regarding nutrition policy in relation with the Rome Conference was adopted in “Health Policy of the Republic of Bulgaria” in 1996. The National Agriculture and Rural Development Plan (NARDP) addresses special care for: young and starting farmers; women; and minorities and disabled persons.

Programmes and Projects: Private projects in the following areas of activities include: Rural tourism; Fishing tourism; Scientific and Photo tourism of endemic and/or protected animal and plant specie; SME’s for the processing of essential oil plants; etc. The measure will also encourage the enforcement of the “equal opportunity” principle by providing equal opportunities to apply for men and women, as well as disabled persons. Women, disabled persons and minorities will receive special attention, support and education should they decide to start or develop activities in the “in-house” craftsmanship area. The programme for IDD control includes iodine fortification of the table salt for humans, the salt for animal consumption and for food production. National representative survey on goiter and urine iodine excretion was conducted in 1997 for estimation the efficiency of IDD Programme. Bulgaria was included in WHO BULGARIA Integrated Non-communicable Disease Intervention (CINDI) programme in 1994. A National Committee at the Ministry of Health was established. Strategies and programmes for intervention directed to positive changes in the dietary habits of Bulgarian population were developed. The programme is going in 7 regions in the BULGARIA. A Nutrition Surveillance Programme was developed for identifying the nutritional problems at the national level, population groups at risk, and assessment of the prevalence and distribution of diet-related health problems. An Intervention Programme for nutrition improvement in Orphanages started in 1998. The activities supported under Measure 1.6. Water Resource Management – Irrigation, are included in the National Investment Programme until 2006.

Status: In 1996 the Bulgarian economy entered into a deep foreign currency and banking crisis, which led to unprecedented financial destabilization and dramatic decline in the economic life. The economic programme approved in mid 1996 which was supported by an agreement with the IMF, failed mostly due to the attempt to bypass the commitments undertaken with respect to the structural reform in the state owned sector. The depth of the financial crisis reflected the economic performance in 1996 and more specifically: real Gross Domestic Product (GDP) declined by approximately 9%; foreign trade contracted by about 12%; the Lev depreciated 6.9 times (from Lev 71 per USD at end 1995 to Lev 487 per USD at end 1996); and annual average inflation increased twice (from 62% in 1995 to 121% to 1996).

Capacity-Building, Education, Training and Awareness-Raising: The National Agricultural Advisory System (NAAS) was established in 1994 with an ordinance of the Minister of Agriculture and Forestry. NAAS has 30 local offices, 3 specialized offices and 4 national centers – study, informational, agro business and accounting, and laboratory. The headquarters of the NAAS are in the Ministry of Agriculture. From 2000 NAAS is a separate legal entity and will be providing equitable access to all major groups – farmers, women, youth, etc. Special attention is provided to young and new farmers regarding their education and training. A national seminar with the

participation of representatives from all the ministries related to the food and nutrition problems, food industries and NGOs was conducted; unfortunately, the Government has not yet adopted the policy.

Information: A decree for improving the nutrition of schoolchildren was adopted by the government and published in 1996. It includes legal and economic measures for nutrition improvement in the school canteens and refreshment bars, makes provision for an increase of the state aid directed to the school meals. Directions for requirements and practical approaches for the establishment of healthy nutrition in school canteens and refreshment bars, as well as Manual with recipes were developed and are under publication. Reference values of Energy and Nutrient Intake for Bulgarian population, were updated in 1994. Bulgarian Food Composition Tables were updated in 1995, and in 1997, the country started to carry out an Annual Food Supply and Nutritional situation assessment. This assessment has to be carried out by the Ministry of Agriculture. Two national representative surveys on Dietary and Nutritional Status of Bulgarian Population were conducted in 1997 and 1998. A national survey on dietary and nutritional status of schoolchildren and women in child bearing age (18-45 years old) was carried out in 1998 and data obtained are under processing.

Research and Technologies: The objective of the measure “Development of environmentally-friendly agricultural practices”, included in the NARDP is to encourage and support farmers to start using environmentally-friendly agricultural production methods. The incentives for farmers will be in the form of direct payments per hectare. Under this measure pilot projects for organic and environmentally friendly agriculture are developed and supported. List of agro-environmental actions included in the measure are: Organic crop farming – eligible crops: cereals, vegetables, oil seeds, fodder crops, vineyards for wine production, aromatic and medical crops; Organic livestock farming - small ruminants - sheep, goats; other ruminants - dairy cows, cows and calves for meat production; bee keeping; etc.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: The Ministry of Environment is responsible for biodiversity conservation and the implementation of the Biodiversity Convention in Bulgaria. The Scientific and Management Authority was established in 1991. Environmental impact assessment (EIA) procedures have been introduced since 1991 under the new Environmental Law and include biodiversity issues. A National Strategy for the Conservation of Biodiversity was elaborated in 1992-94. Priorities for immediate action and support, according to the National Biological Diversity Strategy (1994) include: Strengthening the Scientific Basis for Conservation; Legislative Initiatives; Expanding and Strengthening the Protected Areas Network; Environmental Education and Cooperative Extension; Developing and Implementing an Ecotourism Policy; Stimulating Conservation in the Black Sea Basin; and Stimulating Conservation in the Balkan Peninsula. Major groups involved in biodiversity conservation include the Ministry of Agriculture and Forests, the Ministry of Regional Development and Urban Planning, municipalities, and NGOs.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: Biodiversity financing is derived from the State budget, the National Environmental Protection Fund, and grants.

Cooperation: The Convention on Biological Diversity was signed at the Rio Summit by Bulgaria in 1992 and ratified in 1996. The first report was submitted in 1995 and the next one after that was submitted in 1998. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was ratified in 1991. The second European regional meeting of management, scientific, and other authorities involved in CITES plant issues was held in Sofia, Bulgaria, 14-16 April 1997. Major steps towards the protection of the rich biodiversity in Bulgaria have been undertaken with the financial support from the United States Agency for International Development (USAID), the Swiss Government, and the Monaco Ministry of Environment and Public Affairs. Bilateral biodiversity conservation projects are conducted with Switzerland, Monaco, the United Kingdom, and France. The Ministry of Environment hosted a Regional Workshop on the Practical Implementation of the Convention on Biological Diversity in Central and Eastern European (CEE) countries in Lessidren from 25 to 27 June 1995 and 22 countries participated.

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CHAPTERS 16 AND 34: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY AND TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING.

Decision-Making:

Technologies: The Ministry of Education and Science provides the governmental policy for the promotion of Environmentally Sound Technologies (ESTs) through the “Structure and technology policy” fund, which promotes the activities for development, and transfer of technologies. The Patent Law, which was ratified in 1993, is harmonized with European norms and standards for the protection of intellectual property rights, which in the case of industrial rights, are connected with technology transfer. Environmental Impact Assessment is one of the main criteria used for the evaluation of projects and programmes to be funded.

Biotechnologies: No information available.

Programmes and Projects:

Technologies: One example of a project in which stakeholders were brought together with a view to promote and improve the selection, transfer and application of environmentally sound technologies is in the Black Sea and Danube River projects. Given the ecological problems of the Black sea and Danube river and the need to identify the pollution sources, the Ministry of Education and Science in collaboration with Ministry of Environment and Waters will assign a task force to elaborate the project “Monitoring analysis and summary regarding the Bulgarian coastal zone of the Black sea and Danube river.” The final report of the working group was completed in 1998 and assisted in the decision making process and in the establishment of some measures such as: development of a complex monitoring for assessment of the ecological state of Bulgarian part of Black sea and river Danube. In the framework of the above task it is necessary to establish a special technological Centre to solve the problems of marine technologies in Varna or Burgas cities.

Biotechnologies: No information available.

Status:

Technologies: The most urgent needs for new technologies are related to following economical sectors: - energy production - mining production - chemical industry - non-ferrous metallurgy - building materials industry - animal husbandry and meat production. There are, at present, no mechanisms to stimulate private sector for ecological production.

Biotechnologies: No information available.

Capacity-Building, Education, Training and Awareness-Raising:

Technologies: No information available.

Biotechnologies: No information available.

Information:

Technologies: The Ministry has also established a National Technological Information Centre by the project BG 95.06-03 PHARE programme. A World Wide Web Site for the “Structure and technology policy” fund is presently being created.

Biotechnologies: No information available.

Research and Technologies:

Technologies: The Ministry of Education and Science has presented projects on environmentally sound technologies, financed by “Structure and technological policy” fund and National fund “Science researches” in 1996 and 1997 at various technical exhibitions such as that in Plovdiv, Bulgaria and the Leipzig fair in 17-20.09.1997.

Biotechnologies: No information available.

Financing:

Technologies: The “Structure and technology policy” fund provides financial support for: development and transfer of new technologies, products and goods; assessments of, and expertise for, national and international projects and

programmes; and research on the governmental policy for technological development. In the framework of the fund one of the priorities is ecology and environmental protection. The main criteria for these projects are assessment on impact of the environment and green products and patterns, which follow environmental standards. Among the programmes, which were financed in 1998, are for Eco technologies in different branches of the industry.

Biotechnologies: No information available.

Cooperation:

Technologies: No information available.

Biotechnologies: No information available.

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CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES.

Decision-Making: In the area of integrated coastal zone management and sustainable development, the responsibility for decision-making is with the ministries of Environment and Water, and Regional Development and Public. In the area of marine environmental protection, the decision-making bodies are the ministries of: Environment and Water; and Trade and Tourism. In addition, the responsibility for the area of sustainable use and conservation of marine living resources is with the ministries of: Environment and Water, and Agriculture, Forests and Agricultural Reforms. The coordination is achieved within the framework of the activities included in BSEP (Black Sea Environmental Programme).

Legislation in the area of integrated coastal zone management and sustainable development includes the following: Regulation act of Ministry of Regional Development and Public Works for Black Sea coastal structure; and Procedure for Environmental Impact Assessment of Ministry of Environment and Water. For marine environmental protection, the following apply: Sea Areas Law of Republic of Bulgaria and its part “Protection of the sea environment”; Regulation on standards; and normative basis for determination of the quality of the seawaters. With respect to the sustainable use and conservation of marine living resources, the all-legislative basis is under the actualization process. The National Action Plan for Black Sea, the new Law of the Black Sea Coastal Structure and Law of the Water are under procedure of endorsement by the Parliament. Bulgaria has a project to develop a National Action Plan for the protection and rehabilitation of Black Sea and a National Strategy for Biodiversity.

Programmes and Projects: The percentage of economy contributed by fishing is 0.03% of GDP of 1997. The Ecological programme for Black sea (GEF, PHARE, TACIS) includes protection activities for the control of biodiversity, control of pollution sources, ecological aspects of shipping, exploitation of marine resources.

Status: There is a delay in the work of the new International Convention for the fishing in the Black Sea. Major challenge is limited financial resources.

Capacity-Building, Education, Training and Awareness-Raising: Major projects in this area include: Rehabilitation of Waste water treatment plant in Varna, Bulgaria; Implementation of unified system for state port control for the 6 Black Sea countries; and Construction and bring into use of the set of a smaller Wastewater treatment plants. In addition, a number of workshops are organized within the framework of Black Sea Environmental Programme.

Information: The National Centre of Environment and Sustainable Development publishes annual bulletins and reports about the National System of Environmental monitoring, pollution in the Black Sea region. The Minister of Environment and Water publishes annual reports on the subject as well. A set of publications is produced on the Black Sea Environmental Programme. The Second National Communication on Climate Change, published by Ministry of Environment and Water in 1998, addresses issues related to critical uncertainties. There is a Geographic Information System (GIS) for the integrated management of the coastal zone in National Center for Regional Development and Housing Policy at Ministry of Regional Development and Public Works.

Research and Technologies: The Regional Environment and Water Inspectorate at Ministry of Environment and Water maintain a surveillance system in place to monitor implementation of relevant laws and regulations.

Financing: The National Environmental Protection Fund usually has left grants for communities and short-term credits for industrial enterprises and has financed special monitoring for oil products in marine areas. The State Budget subsidizes the municipalities for environmentally sound projects including Wastewater treatment plants. Donations and projects are received from GEF, UNDP, WB, PHARE, Danish and Japanese Governments.

Cooperation: United Nations Convention on the Law of the Sea was ratified in 1996. The country is also a party to the Convention for the Protection of the Black Sea against Polluting. In addition, Bulgaria is a party to:

MARPOL 73/78; Strategic Action Plan for Rehabilitation and Protection of the Black Sea, signed in 1996 by 6 Black Sea coastal countries.

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CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

Decision-Making: The Ministry of Environment and Waters is the governmental body at national level responsible for coordinating water resource management and development. At the river basin level coordinating bodies are in a preparatory stage.

At present there are mechanisms for resolution of conflicts surrounding water resource management and development. In the “Law on Waters” which is being formulated such mechanisms will be at the basin level. The Commission on natural calamities prepares the country’s policy for disaster preparedness, particularly with respect to floods and droughts. The Strategy for unified management of waters and the Strategy for development of the use of water resources and water preservation are the policies for integrated land and water management and development. The aim of the project is to prepare an Environmental Protection Strategy or an Action Plan, based on an inventory and evaluation of each polluter, assessment of its contribution to the water pollution and to set up medium and long term targets and effluent limitations on industry. At a later stage, feasibility studies and investment projects would be undertaken with international support, in order to address the problems rapidly and in the most comprehensive way.

Major groups involved with freshwater resources management include public authorities at central, district, and local levels; municipal water companies and utilities; industrial enterprises; agricultural enterprises and farmers; and the general public and NGOs.

Programmes and Projects: Freshwater resources and water sanitation are of concern because of severe deficits in some regions. The National Programme for Municipal Wastewater Treatment was recently completed, and the cost of its implementation was estimated at US\$40 million. It includes specific projects for the protection of the Black Sea from land-based and maritime pollution. Japan International Co-operation Agency (JICA) and the Ministry of Environment and Waters developed the project “Study on integrated environmental management for the Maritza river basin”.

Status: To focus on water quality protection of the Maritza River is justified because it is a transboundary river and the pollution of the upper reaches has often created international problems. At the same time, the river is the largest one taking sources within Bulgarian territory, covers with its basin about 20% of the country and accommodates about 25% of its population with all the ensuing pollution. Bulgaria has strengthened water management efforts in recent years. It has assigned increasing financial resources to those efforts. Monitoring and information systems for ambient water quality are well developed. Early progress has been made in increasing water conservation and pollution prevention approaches in industry and livestock production. Among the national priorities for freshwater in Bulgaria are the following: continued and expanded efforts in river basin management with the involvement of all interested parties; establishment of clear priorities for each river basin concerning water supply infrastructure projects; etc. In 1996, the capacity for treating waste water was of 723, 554 millions m³, while 5% of the Waste waters were recycled and 39.8% of urban sewerage was treated. At present there is 98% coverage of water supply and 66% in sanitation coverage. It is intended to improve the situation and increase the latter percentage to 90. Overall problems of water quantity and quality remain severe. Availability and distribution of water present serious difficulties. While current water shortages are related mainly to a prolonged drought, major problems exist with old and leaky distribution systems and with wasteful agricultural and industrial use. Many municipal wastewater treatment plants are incomplete and funding for them is slow.

Capacity-Building, Education, Training and Awareness-Raising: Training courses and seminars for the experts in the central and regional units are required to improve capacity and technical competence. Exchange of knowledge and experience in freshwater management at national and international levels and improvement of public participation in the decision-making process are also required.

Information: The National Institute of Statistics distributes information on water specifically on water usage by agriculture, household and industrial. A bulletin of the Ministry of Environment and Water is published annually.

Research and Technologies: The standards that are used to measure water quality, including contamination of water by Persistent Organic Pollutants include: COD analyses standardized method is ISO 6060: 1989 /E/ “Water quality-Determination of the chemical oxygen demand” and National standard of Bulgaria (BSM) 17.11.4.02-77; DOC analyses (as TOC) - ISO 8245:1987 - “Water quality-Guidelines for the determination of total organic carbon (TOC)”; and For determination of Cl - ISO 92 97, for SO4 - Spectrometric method by using of gelatin. The technological needs in this area include the building of the 3rd level for waste water treatment.

Financing: The system of user charges and pollution fees would produce funds for investment in water sewage networks and waste water treatment plants, and give proper incentives for water conservation and pollution reduction. There is no exact data on the ratio between domestic expenditures for water resource management and development and external funds, because the funds are different and conditions as well, but the ratio for 1997 between the governmental budget and funds of World bank is: 30%: 70%. The financing from the National Fund for Protection of the Environment at Ministry of Environment and Waters was 3.1 billions leva in 1996 and 6.8 billion leva in 1997. The financing from the governmental budget: For water supply facilities in 1996: 340 million Lv for big investment project; 800 million Lv for small investment projects;. For water supply facilities in 1997: 4 billion lv for big investment projects; 2 billion lv for small investment projects;. For waste water treatment facilities in 1996: 406.4 million lv. - 30 projects; For waste water treatment facilities in 1997: 1 656 million lv. - 27 projects.

Cooperation: The current flow of external resources into water resource management and development is: for technical cooperation and grants: 7.5 million CHF; 3.81 million USD in the period of (1996-1998); 322 000 USD and 516 000 USD from the World Bank for water supply in 1996 and 1997 respectively. Bulgaria currently takes part in the following agreements concerning the use of international watercourses, lakes or groundwater: Convention on the Protection and Use of transboundary Watercourses and International lakes (Helsinki, 1992), signed, not ratified; Convention on the Protection of Black Sea against pollution, ratified in 1994; Convention on the cooperation for protection and sustainable use of river Danube, 1994; signed Agreement between Republic of Bulgaria and Republic of Greece for use of Mesta River Waters, signed in 1996.

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CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS.

Decision-Making: The following parties participate in the decision-making roles with respect to toxic chemicals and they include the ministries of: Environment and Water; Agriculture; Health Care; Labour and Social Affairs; Industry; Finance; Customs Department; Trade and Tourism; Tourism; and Transport; The Bulgarian Economic Chamber; The Balkan Scientific and Educational Center for Ecology and Environmental Protection; The Bulgarian Academy of Science; and The University of Chemistry Technology and Metallurgy.

The legislative framework for the environmentally sound management of chemicals is Article 7, paragraph 1 and 2 from the Law on Environmental Protection and the Decree of the Council of Ministers N268/96. The import and transit transportation of dangerous goods and wastes (industrial and hazardous) are also regulated to prevent illegal traffic. The Council of Ministers Decree includes the lists of dangerous goods published by the United Nations; hazardous substances which are prohibited for import in connection with the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol; permission for industrial waste import for recycling for those enterprises with the technology to use raw materials and waste; and wastes according to the European Union (EU) Commission in connection with regulation N259/93 for the survey and control of waste transportation in and out of EU countries.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: Capacity building and technology issues for toxic chemicals relate to improving the cooperation among state institutions, scientific organizations, and NGOs in the decision making process over environmental legislation.

Information: No information available.

Research and Technologies: No information available.

Financing: See under **Cooperation**.

Cooperation: Bulgaria receives financial support for the management of toxic chemicals from UNITAR. Bulgaria's programme is developed and implemented in close cooperation with UNEP, ILO, the United Nations Food and Agriculture Organization (FAO), WHO, the United Nations Industrial Development Organization (UNIDO), and Organisation for Economic Co-operation and Development (OECD). Since October 1996, the Republic of Bulgaria is included in the programme Preparing a National Profile to Assess the National Infrastructure for Management of Chemicals. This programme for OECD is supported by: the United Nations Institute for Training and Research (UNITAR); the Inter-Organization Programme for the Sound Management of Chemicals (IOMC); a cooperative Agreement among the United Nations Environment Programme (UNEP); the International Labour Organization (ILO); the World Health Organization (WHO); and OECD. By the end of the second quarter of 1997, the detailed National Profile to Assess the National Infrastructure for Management of Chemicals was submitted to UNITAR.

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CHAPTERS 20 TO 22: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS, SOLID AND RADIOACTIVE WASTES

Decision-Making:

Hazardous Wastes: The Ministry of Environment is the national coordinator with respect to compliance with the Basel Convention. The decisions are taken in concurrence with the ministries of: Industry; and Health Care under the initiative of the Minister of Environment or the other ministers. During the last biennium, a number of activities were carried out in order to facilitate compliance with the Basel Convention. In 1993, a Council of Ministers Decree was adopted regulating the collection, transportation, storage and deactivation of hazardous waste. In the same year, a draft law on waste was elaborated which reflects the requirements of the Convention. The National Assembly has not adopted the law yet. The major groups involved in hazardous waste decision making include: the legislature; the executive, the Ministry of Environment and all relevant institutions; local governments and local administrations (municipal councils, municipalities, mayors); NGOs; academic circles; and private companies.

Solid Wastes: The policy for solid household waste, a priority in Bulgaria is within the office of local governments. The Ministry of Environment is exercising control over the protection of environmental components, which could be adversely affected by waste treatment. Other executive institutions involved in solid household waste management are the Ministry of Regional Development and Construction (MRDC), the Ministry of Health Care (MHC), and the Ministry of Agriculture and Food Industry (MAFI). In 1995-1996, a draft plan for solid waste management in Bulgaria was elaborated. It was based on successful approaches from the United States and the European Union (EU) and reflects the concrete needs and conditions of the country. Special attention was paid to the preventive reduction of wastes in the context of sustainable development. The proposed solid waste policy is based on the following principles: a clean and healthy environment; the rational use of available resources; Integrated Waste Management; the polluter pays principal; and public participation. These principles are in compliance with international legislative regulations and the concept of sustainable development. Pursuing the management policy for solid household waste requires the organization and coordination of all efforts and the abilities of all groups of society. In Bulgaria, special attention is given to the cooperation and distribution of tasks and responsibilities among state institutions (the Ministry of Environment, MRDC, MHC, the Ministry of Finance (MF), MTFC, the Ministry of Industry (MI), the Ministry of Labour and Social Affairs (MLSA), MAFI, CSM, CP and others) and the municipalities participating in solid household waste management.

Radioactive Wastes: No information available.

Programmes and Projects:

Hazardous Wastes: In the period 1995-1996, a national “Study of the Hazardous Waste Management of Bulgaria,” developed by an American company, was implemented. As outputs of the study, an Action Plan and a Programme for Institutional Strengthening of Hazardous Waste Management, envisage the following measures: Elaboration of a system for permits and standards for hazardous waste management; Requirements for the enterprises generating hazardous waste; Laboratory capacities and programmes for monitoring; Rehabilitation measures; Correcting actions at heightened levels of health risk; and Institutional strengthening of the system.

Solid Waste: No information available.

Radioactive Wastes: No information available.

Status:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Capacity-Building, Education, Training and Awareness-Raising:

Hazardous Wastes: In the framework of the developed project, a series of workshops have been organized in which a number of environmental experts from the municipalities and NGOs have taken part. Bulgarian experts also participate in international fora on solid household waste.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Information:

Hazardous Wastes: See under **Programmes and Projects**.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Research and Technologies:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Financing:

Hazardous Wastes: Local sources, the National Environmental Protection Fund; the Municipal Fund for Environmental Protection; the State budget, and international sources are used to finance hazardous waste management in Bulgaria.

Solid Wastes: Hazardous waste management in Bulgaria is financed by: Local sources; the National Environmental Protection Fund; the Municipal Fund for Environmental Protection; and the State budget.

Radioactive Wastes: No information available.

Cooperation:

Hazardous Wastes: The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was signed by Bulgaria in 1989 and ratified in 1996. International projects for hazardous waste management are implemented under international cooperation programmes.

Solid Wastes: The international fund is from the United States Environmental Protection Agency (US EPA); and the EU's PHARE programme. Regional cooperation in the field of solid household waste management has been initiated, and more concretely includes the joint construction of regional disposal areas, the implementation of programmes for recycling, etc. Through international cooperation, different projects are implemented and joint ventures are established for solid household waste management.

Radioactive Wastes: No information available.

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CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: Policies and strategies are being developed to achieve equality in all aspects of society including issuing a strategy in the year 2000 to eliminate obstacles to the full participation of women in sustainable development. In addition, mechanisms are being developed to assess the implementation and impact of development, and environment policies and programmes on women. The proportion of women decision-makers in parliament was 13.3% in 1992 and 1996, while the proportion of women decision-makers in local government was 19.8% in 1993 and 21.4% in 1996. Capacity-Building, Education, Training and Awareness-Raising: Curricula and educational material are being revised to promote the dissemination of gender-relevant knowledge. Cooperation: The Convention on the Elimination of All Forms of Discrimination Against Women was signed and ratified by Bulgaria on 17 July 1980 and 17 February 1982 respectively.

Children and Youth: Programmes and Projects: Important initiatives for youth include: developing a programme for “green schools”; making environmental video films with the financial resources of the European Union’s PHARE programme and organizing their dissemination to schools, universities, and NGOs; initiation and support of children’s activities and initiatives for cleaning the streets, parks planting, etc on the occasion of international environmental anniversaries; development of programmes and projects for environmental training for inclusion in the mandatory and additional curriculums in cooperation with MEST. Status: Youth serve as advisory participants in national processes related to sustainable development. The goal set in Agenda 21 of ensuring that by year 2000 more than 50% of youth gender balanced have access to appropriate secondary education or vocational training has been reached. Youth unemployment decreased from 44.8% (258,360 persons) to 39.6% (189,826) between 1992 and 1996. Important youth fora in Bulgaria include: the exhibition of children’s pictures under the title “Children and the Environment” during the Third Ministerial Conference Environment for Europe held in Sofia during 1995; the exhibition of materials from Agenda 21 in the museum Earth and People and other towns organized by the NGO, Jatrus-PET-Veliko Tarnovo in 1996; and the National Conference on Environmental Training for teachers in the secondary schools in chemistry, physics, biology, and geography organized by the Ministry of Education, Science and Technology (MEST) and the Ministry of Environment (MoE) in May 1996.

Indigenous People: Status: Indigenous people participate as advisors on an ad hoc basis in developing national policies. Mechanisms for involving indigenous people in resource management strategies and programmes at the national and local level are being discussed.

Non-governmental Organizations: Decision-Making: The Ministry of Environment within the priorities of the policy pursues the involvement of NGOs in the solution of environmental problems. NGOs participate in the preparation and implementation of programmes and projects at regional, national, and international levels. In the legislation, public participation and access to information is covered in the Regulation for Environmental Impact Assessment and the Environmental Protection Law. Additional mechanisms are being planned to promote and allow NGOs to participate in the conception, establishment, and evaluation of official mechanisms to review Agenda 21 implementation in 1998.

Local Authorities: Decision-Making: MRDC develops housing policy; subsidizes construction and reconstruction of water supply systems, local roads and landfills; and adopts standards for the hygienic characteristics of building materials and works. Programmes and Projects: The most important projects funded or coordinated by the MRDC include: the development of a National Strategy for Territorial Development of Bulgaria; the drafting of a Law of Territorial Development; the development of a chart for sustainable development of the Bulgarian landscape; establishing regulations for Black Sea coastal development; and the creation of development plans for 14 coastal zone municipalities. The Bulgarian Government supports Local Agenda 21 initiatives. The Ministry of Regional Development and Construction (MRDC) supports local initiatives aimed at sustainable development. The projects are in the process of preparation, adoption, or implementation.

Workers and Trade Unions: Decision-Making: Bulgaria has ratified four International Labour Organization (ILO) Conventions in the field of workers' rights (Numbers 11, E7, 94, and 98). The Government intends to submit another package of ILO Conventions on this subject.

Business and Industry: No information available.

Scientific and Technological Community: No information available.

Farmers: No information available.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Decision-Making: No information available.

Programmes and Projects: See under the heading **Financing** in the various chapters of this Profile.

Status: The Government is doing its best through available mechanisms, including privatization, to mobilize new and additional local resources to implement a range of actions for ensuring sustainability in the national economy. It has created room for investment activities by providing preferential treatment for investors. The main flows of financial resources are expected to come from the private sector, both national and foreign, the share of which was more than 40% of GNP in 1995. It is calculated that in order to meet environmental, health, and social requirements, the chemical industry, for example, needs an investment of US\$203 million, the metallurgic industry US\$201 million, and the food industry US\$31 million. Eighty percent of the total amount spent for environmental protection in 1994 came from local authorities and the business sector, while 14% came from the State budget and 4% from extra budgetary funds.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Cooperation: The Government will also continue to rely on bilateral and multilateral international cooperation. It is open to reasonable financial innovations like the Swiss-Bulgarian debt-for-environment swap, which is regarded as a win-win project of political goodwill.

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CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: See under the heading **Research and Technologies** in the various chapters of this Profile.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: The National Fund “Science Research” is one institutions, which facilitates dialogue among the scientific community, the Government and the public at large with respect to issues related to sustainable development. It develops and implements national priorities and promotes research. Although it is not involved in the decision-making process it contributes to the process towards sustainability with scientific research. See also under the heading **Research and Technologies** in the various chapters of this Profile.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: The country has developed various strategies and they include: the Environmental Strategy; the National Strategy for Biodiversity Conservation; and the Pan-European Strategy for Landscape and Biodiversity. Major groups involved in education and public awareness include: local governments, which pursue regional environmental policy in conformity with the central government; the educational sector, which reorganizes educational and training policy; business through environment impact assessments; and the agricultural community. Many major groups have undertaken some very successful projects. For example, from a modest beginning in 1995, with crucial help of a series of Democracy Network Programme (DNP) grants, the Education for Democracy Youth Centre (EDYC) has implemented more than 40 projects and become an informal leader of non-governmental organizations in Plovdiv, Bulgaria's second largest city. The youth council activists formed an independent NGO, which secured a DNP grant for a project to improve youth labour codes. The next EDYC project brought training that helped three Plovdiv school councils become effective at making decisions and influencing school curriculum and policy. Local school boards are new in Bulgaria, which has long relied on central government for school related decisions; the new school councils involve parents, teachers, and school administrative staff.

Programmes and Projects: Among the actions taken to integrate environment and sustainable development curricula into education at all levels are the following: Governmental decree N 241, of 26.09.1996, and the Act for Higher Education provides the information about subject "Ecology and environmental protection" with a professional qualification "Ecologist"; and the "Environmental Education Curriculum Development Project for Primary Schools in Bulgaria" of TIME Foundation (NGO) explored the possibilities for integrating environmental education into primary school curricula. The project produced two books: Curriculum for Integrated Environmental Education; and Manual for Teachers. Both texts have been approved by the Ministry of Education and are recommended for use in schools. The Capacity 21 Programme in Bulgaria has a very strong component relating to education and awareness raising, which includes, among others, the following actions: assisting the Ministry of Education, Science and Technologies to develop a new education strategy for integrating sustainable development concepts into primary and secondary school's extra - curricular programmes; developing and implementing a "training of trainers" programme with older students and students from teacher training colleges; etc.

See also under **Cooperation** and the heading **Capacity-Building, Education, Training and Awareness-Raising** in the various chapters of this Profile.

Status: The Bulgarian Constitution guarantees free education for all Bulgarian citizens under age of 16. There are also scholarships for the children from poor families. In cooperation with the Ministry of Education, Science and Technology, the conception of a new programme on environmental education and training has been completed. The challenge is now to find ways to make the materials available to teachers throughout the country.

Information: The Ministry of Environment is financing media dissemination of information and knowledge connected with environmental protection and sustainable development policy. The Ministry issues brochures, video films, and books. Training courses are organized for the Regional Inspectorates, different public groups, local governments, NGOs, and representatives of the agricultural sector.

Research and Technologies: The University of Chemical Technology and Metallurgy had a 5 years programme for education of the subject "Environmental protection and sustainable development" with funding from the TEMPUS JEP Programme.

Financing: Financing of environmental education in Bulgaria is provided through the National Environmental Protection Fund and international programmes and projects. See also Research and Technologies.

Cooperation: The European Union launched a 1.5. mln. ECU project in 1997 to help protect the Black Sea. The project works in 5 countries Bulgaria, Romania, Ukraine, Russia and Georgia. TIME Foundation is the Regional Coordinator of the sub-component "Environmental Education and Public Awareness." The goal of the sub-component is to raise public awareness of the Black Sea environmental problems and to stimulate public participation in their resolution. The Environmental Training Project for Central and Eastern Europe (ETP) has

been funded as a Cooperative Agreement between EUR/DR/ENR of the US Agency for International Development and a Consortium led by the Hubert H. Humphrey Institute for Public Affairs at the University of Minnesota. The Consortium also includes: the Center for Hazardous Materials Research (CHMR); the World Wildlife Fund-US (WWF-US); and the Institute for Sustainable Communities (ISC). Target countries include: Bulgaria; the Czech Republic; Hungary; Poland; Romania; and Slovakia. In each country, USAID selected target regions--normally environmental hot spots.

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CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES.

This issue has been covered either under Chapter 2 or under the heading **Cooperation** in the various chapters of this Profile.

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

This issue deals mainly with activities undertaken by the UN System.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

This issue has been covered under the heading **Cooperation** in the various chapters of this Profile.

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

Decision-Making: A National Sustainable Development Commission was established as an expert committee of the Regional Development Council under the Council of Ministers.

The Regional Development Act adopted by the Bulgarian National Assembly in 1999 stipulates the establishment of the Commission. Its chairman is the Minister of Environment and Waters and its members are the ministers of: Labour and Social Care; Healthcare; Agriculture and Forests; Culture; and the deputy-ministers of Tourism, Economy and Regional Development. The main functions and objectives of the Commission include: supporting a constructive national dialogue to achieve consensus on key issues of sustainable development in Bulgaria; defining means for unification of national and local sustainable development initiatives; and evaluating the National Economic Development Plan.

The National Economic Development Plan for 2000-2006 (NEDP) was prepared in keeping with the National EU Accession Strategy, with the Bulgaria 2001 Programme of the Government, the updated National Programme for the Adoption of the Acquis and the Accession Partnership Programme. The legal basis for the National Economic Development Plan is the Regional Development Act, which states that the plan is a “unity of sectoral and regional programmes based on an analysis of the overall development of the country and on an overall development strategy.” The three documents cover the same 7-year period. The National Economic Development Plan is first and foremost a strategic document by through which Bulgaria defines its needs and its future development orientation.

The National Agricultural and Rural Development Plan was elaborated by a working group at the Ministry of Agriculture, Forests and Agrarian Reform including representatives from the ministries of: Industry; Environment and Waters; Regional Development and Public Works; and assisted by members from the organizations of; agriculture, food producers, NGOs and regional development agencies.

Programmes and Projects: In 1999, a law established a National Agricultural Extension Service. It transformed the National Agricultural Extension Service existing since 1995 into an independent unit with its own budget. Its entire activity is aimed to contribute for sustainable development of Bulgarian agriculture.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: The local agricultural extension services provide on-site advice and consultancy. Also, they submit information through the local newspapers and the electronic media. They provide information to the farmers about open days and demonstrations organized in agricultural farms. The local extension services have the task of making the farmers aware of new credit lines and of the lending conditions, and also to assist the producers to prepare business projects. They organize training, qualification and re-qualification courses.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The Strategy for Agricultural and Rural Development was discussed in a meeting of the CCU for the Special Preparation Programme. Higher transparency of the programming process was achieved by two public hearings on priorities and measures of the plan. Representatives of the European Commission were present at the hearing, in keeping with the partnership principle.

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CHAPTER: INDUSTRY

Decision-Making: No information available.

Programmes and Projects: See under **Cooperation**

Status: The principle threats from industry in Bulgaria come from the emissions of NO_x, heavy metals, aromatic hydrocarbons, volatile organic compounds, dust and pollution of water. These threats come mostly from the ferrous and non-ferrous metallurgy, petro-chemical industry, basic chemicals industry, pharmaceuticals industry, and the power plants associated to these industries. In the industrial sector, efforts are concentrated on solving specific problems in accordance with national and international regulations for the environment.

Little large-scale investment for pollution control equipment has been made to date. As a result, the pollution and resource intensity of the economy remains very high. The recent reduction of discharges of pollutants into the air and water was principally due to the decline of industrial and agricultural production (due to the recession that took place before 1993) rather than to more efficient production or cleaner industrial processes. Pollution loads may increase once economic growth resumes, unless environmental policy is strengthened. In fact, the 1.4% growth of the GNP registered in 1994 was equal to an increase of 300,000 tons of emissions compared to 1993. About 41% of the total population has been threatened by air and water pollution coming from the energy sector, industry, and transportation. Fourteen hot spots with high levels of pollution harmful to human health have been declared in the country. Overall problems of water quantity and quality remain severe, however early progress has been made in increasing water conservation and pollution prevention approaches in industry and livestock production.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Bulgaria in partnership with the World Bank is finalizing a Pollution Abatement Programme which includes implementation of several projects involving technological reconstruction and innovations aimed at phasing out, for example, heavy metal pollution from copper smelters. Nevertheless, most of the high pollution, industrial facilities are still in operation.

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CHAPTER: SUSTAINABLE TOURISM

Decision-Making: Responsible central bodies include: the Ministry of Trade and Tourism; the National Tourism Board; the Tourism Product Development Department; and the National Regional and Local Policy Department. At the local level, the Municipal administration, the District administration and the local tourism boards could have such functions.

As of 1998, after the entry into force of the Tourism Act, the inspection, control and sanctions over tourism activities have been legally regulated. The Protected Areas Act (State Gazette No. 133 of November 11, 1998) regulates the terms and procedures for the use of nature in the protected areas for tourism development purposes. Among the additional Codes of Practice, Standards or Guidelines for the activities of industry in sustainable tourism are the following: Rules on the application of the Prevention of Pollution in the Air, Waters and Soils Act; Order No. 2 of 1989 on the secured sanitary zones around the water sources; Order No. 2 of 1995 on the Rules and Regulations for the Territory Planning of the Black Sea coast; etc.

The National Tourism Development Strategy of Bulgaria envisages the development of sustainable tourism, including countryside territories, possessing suitable natural and human resources. Both eco-tourism and nature-based tourism are envisaged to be an integral part of the national Tourism Development strategy of Bulgaria. In addition, according to the National Strategy for the Conservation of Biodiversity, elaborated in 1992-94, one of the priorities for immediate action and support is the development and implementation of an Ecotourism Policy. Other strategies and programmes which help to define Bulgaria's strategy toward sustainable tourism include the following: The Common European Strategy on Bio- and Landscape Diversity; The Convention on Pollution Prevention in the Black Sea - Bucharest, 1992; National Programme for Environment and Health - 1998; etc.

Programmes and Projects: Among the activities underway which are geared both to sustainable tourism and to eco-tourism and nature-based tourism are the following: the development of eco-paths throughout the country in view of the popularization of Eco-tourism by the Bulgaria Eco-and Rural Tourism Association; the Bulgarian - Swiss biodiversity Conservation Programme, funded by the Swiss Government, which has as its main goal to work for the preservation of the natural diversity of Bulgaria; and the creation of Nature Conservation and Information Centres in Poda, Malko Tarnovo and Madjarovo, which paid special attention to the development of environmental tourism activities, which are financial source for sustaining the already created centres and alternative for the local development in the less developed regions around the National parks. See also under **Capacity-Building, Education, Training and Awareness-Raising and Cooperation**

Status: According to the approximate data in 1997, international tourism provided for 4.85% of the GDP, thus presenting 9.8% of the total export of goods and services in the country's balance of payments. The share of tourism only in the export of services is 29.6%. International and domestic tourism refer to each other in relation 70% to 30% in terms of contribution to the country's economy. According to the EU research (PHARE programme) in 1994 the people involved in tourism only were between 98 000 and 120 000 (season workers included), and tourism occupied a share of 3.0% in the total employment of the country. In agriculture only (production of agricultural products) tourism provided more than 58 000 jobs. In 1998, as compared to the other sectors of the economy, the share of tourism probably exceeds 14-16% in terms of total employment (direct and resulting from tourism activities) in the country and the number of people, directly involved in tourism is already over 5-6%. In the 1988-1997 year period, the total number of tourists, which visited the country, dropped down by 12%. In 1997, there was an increase of 6.6% as compared to the previous year. Having in mind the total decline in the country's economy the share of international tourism in the GDP was increased by 2.2% in 1988, by 4.85% in 1997 and is expected to reach 5.7-5.8% in 1998. An increase by 20% in the total number of tourists is expected in 1999. Bulgaria thinks that the period of decline is over and, for the period till 2008.

The absence of transport infrastructure is a constraint for the sustainable development of many territories, mainly in the countryside.

Capacity-Building, Education, Training and Awareness-Raising: The Tertiary schools provide appropriate education for sustainable tourism. NGOs, product and branch associations, among others are carrying out different forms of education in this field. Eco-tourism and nature-based tourism are a part of the national tourism promotion.

A project of TIME Foundation Television Series “My Eco World” focused on nature-based tourism in the region of Central Rhodopes Mountains. The 3, 5 or 10 minutes’ shows were broadcasted on this topic on the National Television within the environmental programme “Planeta” during 2 months period. The goal of the project was to provoke public interest to this kind of tourism and solicit feedback reaction on the public interest as well as to assist the local population most specifically the Union of Rhodopian Private Hotel and Restaurant Owners in promoting their resources for Eco-tourism.

Information: Different sources provide information amongst which are the following: the World Tourism Organization (handbooks and bulletins); studies of Bulgarian tourism experts; and scientists. The distribution of tourism information is done as follows: at the national level: via the media, the tourism information centers and local tourism organizations, printed media for specialized tourism information and Internet and At the international level: via the promotions of the tourism representatives of the ministries in the respective countries, the media, the foreign tour-operators - traditional Bulgarian partners, participation in tourism fairs and exhibitions and Internet. Bulgaria is now in the process of setting up a web site for the Ministry of Trade and Tourism, including the information on tourism conditions in Bulgaria, the tourism resources, hotels, restaurants and tour-operators. Available now on the Web or through email are several Bulgarian tourism companies and associations, amongst which are the following: Tourism Advertising company: www.trawel.-bulgaria.com; National Information and Advertising Center to the Ministry of Trade and Tourism infctr@tir.ttm.bg; Tourist Information and Registration tir@tir.ttm.bg; International Convention Center tir-cicm@tir.ttm.bg; Zlatni Piasaci Tourist Co. Bulgaria goldensands@goldensands.bg; etc.

Research and Technologies: The social, institutional, cultural, etc. influence of tourism has been the subject of research, analyses and scientific work. Up to now there are a number of scientific publications, directed towards policymaking based on the sustainable environmental development and preservation of the anthropogenetic tourism resources and the cultural heritage in particular. There is anthropogenic pressure in the regions with localization of recreation activities.

Financing: Due to the restrictive financial policy of the country imposed by the currency board, the financing of tourism development projects comes mainly from international programmes and organizations, the privatization programme, under the Foreign Investments Promotion Act, etc.

Cooperation: Capacity 21, UNDP funded project through the Ministry of Regional Planning and Construction focuses its efforts in the community of Velingrad on building tourism information centre.

The Government authorities and the local administration authorities cooperate with the local and regional tourism organizations in the preparation of tourism development programmes, marketing activities and the control over the observation of the Regulations and professional ethics in the field of tourism. The Republic of Bulgaria has signed tourism cooperation contracts with 21 countries; seven of them signed in 1998. The signing of four other contracts of this kind is to take place in the near future.

Bulgaria has membership with the following international tourism organizations: the World Tourism Organization; the European Tourism Commission; the Central European Initiative; the Danube Promotion Community; the Danube Commission; and the Black Sea Economic Co-operation. Phare/Tacis 1995 Funds for the Black Sea Environmental Programme project has a special sub-component dedicated to Sustainable Tourism Development. International Centre of Water Studies, The Netherlands, manages the Project itself.

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